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September 21, 2004

CERTIFICATE OF MAILING

I, certify that this correspondence is being deposited with the U.S. Postal Service as First Class mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on the date below:

September 21, 2004

Date: *Margaret J. Sampson*
Margaret J. Sampson

MAIL STOP AMENDMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Re: U.S. Patent Application Serial No. 10/798,790 entitled "DERIVATION OF TERMINALLY DIFFERENTIATED DOPAMINERGIC NEURONS FROM HUMAN EMBRYONIC STEM CELLS" by Satish Totey and Geeta Ravindran
(Our Ref: REL494/4-002US/58000)

Dear Sir:

Enclosed for filing in connection with the above-referenced patent application are:

1. Information Disclosure Statement;
2. Form PTO/SB/08 including references A1-A14, B1-B7 and C1-C37; and
3. A return postcard to acknowledge receipt of these documents. Please date stamp and mail this postcard upon receipt.

It is believed that no fees are due relating to these documents. Should any fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason relating to the enclosed materials, the Commissioner is hereby authorized to deduct said fees from VINSON & ELKINS L.L.P. Deposit Account No. 22-0365/REL494/4-002US/58000.

Respectfully submitted,

Margaret J. Sampson

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Reg. No. 47,052

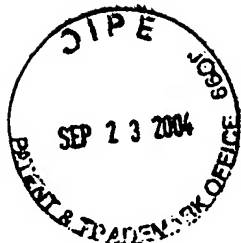
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Enclosures

cc: Purnima Malkani (w/o encls.)

Marya Breig, Docket Specialist (w/o encls.)

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:
Satish Totey and Geeta Ravindran

Serial No.: 10/798,790

Filed: March 11, 2004

For: DERIVATION OF TERMINALLY
DIFFERENTIATED DOPAMINERGIC
NEURONS FROM HUMAN
EMBRYONIC STEM CELLS

Group Art Unit: 1636

Examiner: Unknown

Atty. Dkt. No.: REL494/4-002US/58000

Confirmation No. 5605

**CERTIFICATE OF MAILING
37 C.F.R. 1.8**

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INFORMATION DISCLOSURE STATEMENT

MAIL STOP AMENDMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on the attached Form PTO/SB/08 be considered by the Examiner and made of record. Copies of the listed documents (References A1-A14, B1-B7, and C1-C37) required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R. §§ 1.97(g),(h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

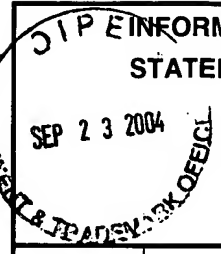
The present Information Disclosure Statement is being filed prior to the receipt of a first Official Action reflecting an examination on the merits, and hence is believed to be timely filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is hereby authorized to deduct said fees from Vinson & Elkins L.L.P. Deposit Account No. 22-0365/REL494/4-002US/58000.

Respectfully submitted,



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INFORMATION DISCLOSURE STATEMENT BY APPLICANT 				Application Number	10/798,790	
				Filing Date	3-11-04	
				First Named Inventor	Satish Totey & Getta Ravindran	
				Group Art Unit	1636	
				Examiner Name	Unknown	
Sheet	1	of	5	Attorney Docket	REL494/4-002US/58000	
U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No.	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	
		Number	Kind Code (if known)			
	A1	5,514,552		05/07/96	Rosner et al.	
	A2	5,843,780		12/01/98	Thomson	
	A3	6,090,622		07/18/00	Gearhart et al.	
	A4	6,200,806		03/13/01	Thomson	
	A5	6,602,711		08/05/03	Thomson et al.	
	A6	2002/0009743		01/24/02	Carpenter	
	A7	2002/0019046		02/14/02	Carpenter et al.	
	A8	2002/0039724		04/04/02	Carpenter	
	A9	2002/0151053		10/17/02	Carpenter et al.	
	A10	2003/0036195		02/20/03	Studer et al.	
	A11	2003/0068819		04/10/03	Zhang et al.	
	A12	2003/0103949		06/05/03	Carpenter et al.	
	A13	2003/0104616		06/05/03	Parikh et al.	
	A14	2004/0014210		01/22/04	Jessell et al.	
Examiner Initials	Cite No.	FOREIGN PATENT DOCUMENTS		Publication Date MM-DD-YYYY (Number 43)	Name of Patentee or Applicant of Cited Document	
		Country Code	Number			Kind Code (if known)
	B1	WO	01/51616		07/19/01	Geron Corporation
	B2	WO	01/83715		11/08/01	The Government of the U.S. of America
	B3	WO	01/88104		11/22/01	Geron Corporation
	B4	WO	02/086073		10/31/02	Memorial Sloan-Kettering Cancer Center
	B5	WO	03/000868		01/03/03	Geron Corporation
	B6	WO	03/104444		12/18/03	ES Cell International PTE Ltd.
	B7	WO	2004/015077		02/19/04	University of Georgia Research Foundation, Inc.
Examiner Signature				Date Considered		

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Sheet	2	of	5	Attorney Docket Number	REL494/4-002US/58000
NON-PATENT LITERATURE DOCUMENTS					
	C1	Åkerud <i>et al.</i> , "Neuroprotection through Delivery of Glial Cell Line-Derived Neurotrophic Factor by Neural Stem Cells in a Mouse Model of Parkinson's Disease." <i>J. Neurosci.</i> 21:8108-8118 (2001)			
	C2	Bain <i>et al.</i> , "Embryonic Stem Cells Express Neuronal Properties <i>in Vitro</i> ." <i>Developmental Biology</i> 168: 342-357 (1995)			
	C3	Björklund <i>et al.</i> , "Embryonic Stem Cells Develop Into Functional Dopaminergic Neurons After Transplantation in a Parkinson Rat Model." <i>PNAS</i> 99:2344-2349 (2002)			
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	C5	Brundin <i>et al.</i> , "Intracerebral Grafting of Dopamine Neurons." <i>Ann. N.Y. Acad. Sci.</i> 495:473-496 (1987)			
	C6	Brüstle <i>et al.</i> , "Embryonic Stem Cell-Derived Glial Precursors: A Source of Myelinating Transplants." <i>Science Magazine</i> 285:754-56 (1999)			
	C7	Buehr <i>et al.</i> , "Mesonephric Contribution to Testis Differentiation in the Fetal Mouse." <i>Development</i> 117:273-281 (1993)			
	C8	Damjanov <i>et al.</i> , "Retinoic Acid-Induced Differentiation of the Developmentally Pluripotent Human Germ Cell Tumor-Derived Cell Line, NCCIT." <i>Laboratory Investigation</i> 68:220-232 (1993)			
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	C11	Eriksson <i>et al.</i> , "Neurogenesis in the Adult Human Hippocampus." <i>Nature America, Inc.</i> 4:1313-1317 (1998)
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	C15	Kawasaki <i>et al.</i> , "Induction of Midbrain Dopaminergic Neurotechnique Neurons from ES Cells by Stromal Cell-Derived Inducing Activity." <i>Neuron</i> 28:31-40 (2000)
	C16	Kim <i>et al.</i> , "Dopamine Neurons Derived from Embryonic Stem Cells Function in an Animal Model of Parkinson's Disease." <i>Nature</i> 418:50-56 (2002)
	C17	Kukekov <i>et al.</i> , "Multipotent Stem/Progenitor Cells with Similar Properties Arise From Two Neurogenic Regions of Adult Human Brain." <i>Exper. Neurology</i> 156:333-344 (1999)
	C18	Lauder and Bloom, "Ontogeny of Monoamine Neurons in the Locus Coeruleus, Raphe Nuclei and Substantia Nigra of the Rat." <i>J. Comp. Neur.</i> 155:469-481 (1974)
	C19	Lee <i>et al.</i> , "Efficient Generation of Midbrain and Hindbrain Neurons From Mouse Embryonic Stem Cells." <i>Nature Biotech.</i> 18:675-679 (2000)
	C20	Lin <i>et al.</i> , "GDNF: A Glial Cell Line-Derived Neurotrophic Factor for Midbrain Dopaminergic Neurons." <i>Science</i> 260:1130-32 (1993)
	C21	Lin <i>et al.</i> , "Purification and Initial Characterization of Rat B49 Glial Cell Line-Derived Neurotrophic Factor." <i>Jour. of Neurochem.</i> 63:758-768 (1994)
	C22	Nadaud <i>et al.</i> , "Functional Recovery Following Transplantation of Ventral Mesencephalic Cells in Rat Subjected to 6-OHDA Lesions of the Mesolimbic Dopaminergic Neurons." <i>Brain Research</i> 304:137-141 (1984)

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	C23	Reubinoff <i>et al.</i> , "Embryonic Stem Cell Lines From Human Blastocysts: Somatic Differentiation in vitro." Nature Biotech. 18:399-404 (2000)
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	C26	Rosenthal, "Auto Transplants for Parkinson's Disease?" Neuron 20:169-172 (1998)
	C27	Shamblott <i>et al.</i> , "Derivation of Pluripotent Stem Cells From Cultured Human Primordial Germ Cells." Proc. Natl. Acad. Sci. 95:13726-13731 (1998)
	C28	Strömberg <i>et al.</i> , "Glial Cell Line-Derived Neurotrophic Factor is Expressed in the Developing but Not Adult Striatum and Stimulates Developing Dopamine Neurons <i>in vivo</i> ." Experimental Neurology 124:401-412 (1993)
	C29	Svendsen <i>et al.</i> , "Long-Term Survival of Human Central Nervous System Progenitor Cells Transplanted into a Rat Model of Parkinson's Disease." Experimental Neurology 148:135-146 (1997)
	C30	Thomson <i>et al.</i> , "Embryonic Stem Cell Lines Derived from Human Blastocysts." Science 282:1145-47 (1998)
	C31	Thomson <i>et al.</i> , "Isolation of a Primate Embryonic Stem Cell Line." Proc. Natl. Acad. Sci. 92:7844-7848 (1995)
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	C33	Vescovi <i>et al.</i> , "Isolation and Cloning of Multipotential Stem Cells from the Embryonic Human CNS and Establishment of Transplantable Human Neural Stem Cell Lines by Epigenetic Stimulation." Exper. Neurology 156:71-83 (1999)

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	C34	Vescovi <i>et al.</i> , "Isolation and Intracerebral Grafting of Nontransformed Multipotential Embryonic Human CNS Stem Cells." <i>Journal of Neurotrauma</i> 16:689-693 (1999)
	C35	Winkler <i>et al.</i> , "Transplantation in the Rat Model of Parkinson's Disease: Ectopic Versus Homotopic Graft Placement." <i>Progress in Brain Research</i> 127:233-265
	C36	Yurek and Sladek, "Dopamine Cell Replacement: Parkinson's Disease." <i>Annu. Rev. Neurosci.</i> 13:415-40 (1990)
	C37	Zhang <i>et al.</i> , "In vitro Differentiation of Transplantable Neural Precursors From Human Embryonic Stem Cells." <i>Nature Biotech.</i> 19:1129-1133 (2001)
Examiner Signature		Date Considered